

Day-to-Day Management of Public Funds

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City Treasurer
City of Anaheim

California Debt and Investment Advisory Commission

November 20, 2008

Introduction

- Daily Routine for Cash Management
 - Pre-Investment Activities
 - Investment of Daily Funds
 - Reconciliation of Daily Activities

Assumptions -

- Computer - Desktop / Lap Top
 - Spreadsheet software (EXCEL, Quattro Pro, etc.)
 - Staff level of competence for software (formula's, etc.)
- Access to the Internet
- Custodian Bank
 - Delivery versus Payment (DVP)
- Internal Controls
 - Independent Staff to Reconcile/ Audit Investments

Pre-Investment Activities

- Download Prior Day Bank Activity
- Download Intra-Day Bank Activity
- Update Cash Flow Model

Bank Activity

- Prior Day Activity – Report
 - Shows “ Collected Balance”
 - Shows “ Funds Available”
- Reconcile Bank Activity to Cash Flow Values”
 - Review Deposits (Wires, ACH)
 - Review Expenditures (Wires, ACH, Checks)
 - Review “Intra Day” Bank activity

Daily Cash Flow

- Identify current revenues
- Identify current expenditures
- Determine amount of “idle” cash
- Investment of “idle” cash
- Reconciliation of cash flow

Cash Flow Example - 1st Run

	<u>11/17/08</u>
● Begin Ledger Balance	\$ 42,000
● Receipts	\$ 37,000
● Maturities	\$ 54,000
● Total Revenues	\$ 91,000
● Warrants Paid	\$ 65,000
● Payroll	\$ 1,600
● Investments	\$ - 0 -
● Debt Service	\$ - 0 -
● Total Expenditures	\$ 66,600
● Ending Ledger Balance	\$ 66,400
● Target Ledger Balance	\$ 40,000
● Available for Investment	\$ 26,400

Cash Flow Example - 2nd Run

	<u>11/17/08</u>	<u>11/17/08</u>
● Begin Ledger Balance	\$ 42,000	\$ 42,000
● Receipts	\$ 37,000	\$ 37,000
● Maturities	\$ 54,000	\$ 54,000
● Total Revenues	\$ 91,000	\$ 91,000
● Warrants Paid	\$ 65,000	\$ 65,000
● Payroll	\$ 1,600	\$ 1,600
● Investments	\$ - 0 -	\$ 26,400
● Debt Service	\$ - 0 -	\$ - 0 -
● Total Expenditures	\$ 66,600	\$ 93,000
● Ending Ledger Balance	\$ 66,400	\$ 40,000
● Target Ledger Balance	\$ 40,000	\$ 40,000
● Available for Investment	\$ 26,400	\$ - 0 -

Multiple Day Cash Flow Example

	1 st Run	2 nd Run			
	<u>11/17/08</u>	<u>11/17/08</u>	<u>11/18/08</u>	<u>11/19/08</u>	<u>11/20/08</u>
● Begin Ledger Balance	\$ 42,000	\$ 42,000	\$40,000	\$40,000	\$40,000
● Receipts	\$ 37,000	\$ 37,000	\$15,000	\$22,000	\$19,000
● Maturities	\$ 54,000	\$ 54,000	\$27,000	\$38,000	\$ - 0 -
● Total Revenues	\$ 91,000	\$ 91,000	\$35,000	\$60,000	\$19,000
● Warrants Paid	\$ 65,000	\$ 65,000	\$35,000	\$47,000	\$28,000
● Payroll	\$ 1,600	\$ 1,600	\$ - 0 -	\$ - 0 -	\$32,000
● Investments	\$ - 0 -	\$ 26,400	\$	\$	\$
● Debt Service	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ 6,500
● Total Expenditures	\$ 66,600	\$ 93,000	\$35,000	\$47,000	\$66,500
● Ending Ledger Balance	\$ 66,400	\$ 40,000	\$47,000	\$53,000	(\$ 7,500)
● Target Ledger Balance	\$ 40,000	\$ 40,000	\$40,000	\$40,000	\$40,000
● Available for Investment	\$ 26,400	\$ - 0 -	\$ 7,000	\$13,000	(\$47,500)

Multiple Day Cash Flow – Final Targeting to November 20th

	1 st Run	2 nd Run			
	<u>11/17/08</u>	<u>11/17/08</u>	<u>11/18/08</u>	<u>11/19/08</u>	<u>11/20/08</u>
● Begin Ledger Balance	\$ 42,000	\$ 42,000	\$40,000	\$40,000	\$40,000
● Receipts	\$ 37,000	\$ 37,000	\$15,000	\$22,000	\$19,000
● Maturities	\$ 54,000	\$ 54,000	\$27,000	\$38,000	\$46,400
● Total Revenues	\$ 91,000	\$ 91,000	\$35,000	\$60,000	\$65,400
● Warrants Paid	\$ 65,000	\$ 65,000	\$35,000	\$47,000	\$28,000
● Payroll	\$ 1,600	\$ 1,600	\$ - 0 -	\$ - 0 -	\$32,000
● Investments	\$ - 0 -	\$ 26,400	\$ 7,000	\$13,000	\$
● Debt Service	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ 6,500
● Total Expenditures	\$ 66,600	\$ 93,000	\$35,000	\$47,000	\$66,500
● Ending Ledger Balance	\$ 66,400	\$ 40,000	\$47,000	\$53,000	\$38,900
● Target Ledger Balance	\$ 40,000	\$ 40,000	\$40,000	\$40,000	\$40,000
● Available for Investment	\$ 26,400	\$ - 0 -	\$ - 0 -	\$ - 0 -	(\$ 1,100)

Extended Cash Flow

- Expand one day example to a 30 day timeline
- Expand to a 90 day timeline
- Expand to a one-year timeline

Detail of Cash Flow

- Identify your major revenue sources:
 - Sales Tax, Motor Vehicle in Lieu, Property Tax, etc.
- Identify your major expenditures:
 - Payroll, Debt Service, Contracts, etc.
- Sources of information:
 - Budget, Annual Financial Report (CAFR),
Departments, individual files/receipts/payments

Portfolio Management - Liquidity

- Calif. Govt. Code requires statement of six (6) month liquidity (Section - 53646, b, 3)
- Your agency unexpected expenditures
- Your 'sleep' level requires liquidity.
- You have to have funds for:
 - Payroll - Debt Service - Contractual Payments
 - Legal Settlements - ??????

Investment of Funds

- Focus on Investment Objectives
 - Safety
 - Liquidity
 - Return on Investment (Yield)
 - Don't confuse this with "Return of Investment"
(see "Safety")

What to Invest Funds In ?

Determined by:

- Extended Cash flow
- California Government Code (53601)
- Agencies Investment Policy
- Investment Objectives
- Market access

Short-Term Investments

One Day Liquidity

- Demand / Checking Account
- Bank “Sweep Account”
- Money Market Account
- L.A.I.F. – State of California
- Repurchase Agreement -

Short-Term Investments One Day or Longer

- U.S. Treasury Bills
- Federal Agency Discount Notes
- Time Deposits (TCD) – Collateralized
- Commercial Paper

Credit Quality of Investments

- Create an “Approved” List of Issuers
 - Selection criteria based on:
 - Credit quality of issuer
 - Market presence of issuer
- List should be reviewed frequently
 - Minimum annually, quarterly is better
 - Have access to timely market data

“Approved” List of Issuers

- Credit criteria should match your agency’s risk profile
- Types of securities (CP, MTN, MBS, etc.) should match your Investment Policy for permitted investments
- Question if the proposed issuer/security is appropriate for your agency

Credit Quality

- Credit Rating – doesn't tell the whole story
 - Lehman Brothers was A1/P1 before bankruptcy
- Credit Ratings tend to “Lag” Market Action
- Distressed Credit – Market Yield moves higher than competitors/like issuers

Basic Portfolio - Laddered

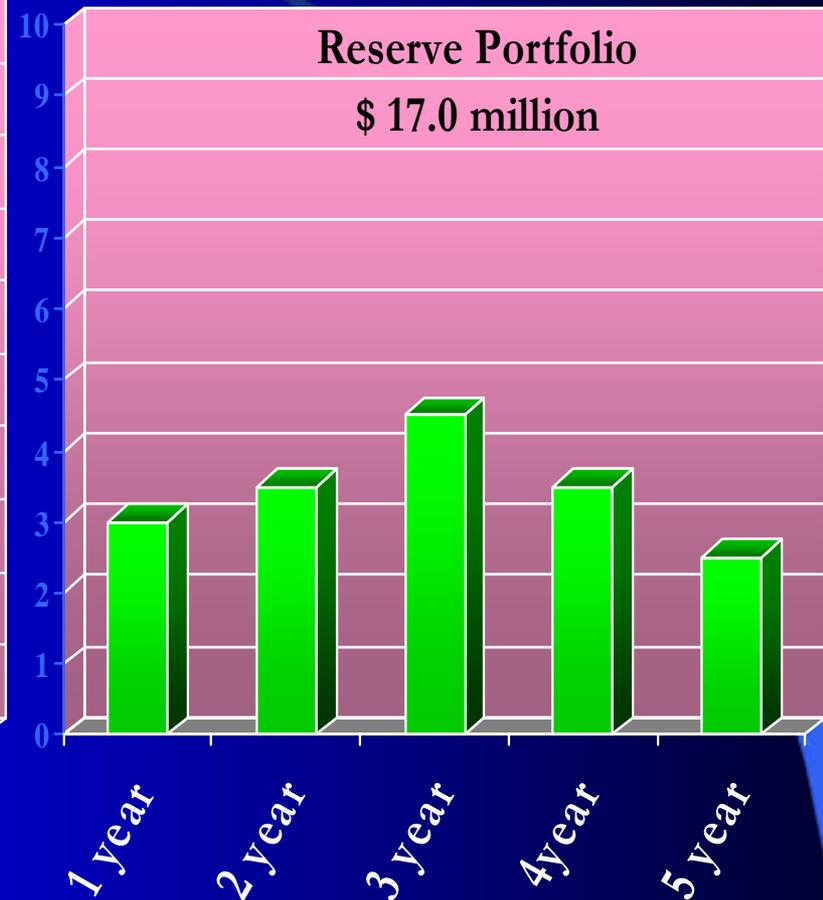


Suggested Portfolio Structure

- Divide your portfolio into:
 - Short-term maturities or Core Portfolio
 - Long-term maturities or Reserve Portfolio
- Advantages:
 - Clearly define funds available for liquidity
 - Can optimize returns on both sub-portfolios
 - Each can be managed to a unique benchmark

Portfolio

– Core / Reserve



Determining 'Fair' Value of Investment Securities

- Financial Sources for Security Valuation
 - Bloomberg Financial Systems
 - Broker / Dealer Inventory Listings
 - Internet Broker / Dealer Websites
 - Competitive Bids / Offers
 - Trade Web
 - GFOA Yield Advantage
 - Comparable value to like Securities
 - Spread between products.

Bloomberg - USSW

<HELP> for explanation.

M-Mkt **USSW**

Change Country		US GOVT/SWAP/AGENCY COMPOSITE										10:15:56	
GV ASK/CHG		SW/GV	SWAP MID		FNMA	FN/GV		FN/SW	FHLM	FH/GV		FH/SW	
2Y	1.548 -0.016	114.2 3.8	2.680 -0.037	2.971	159.1 +1.2	27.1 -3.1	3.050	158.1	35.1 -3.1				
3Y	1.766 -0.053	120.9 1.6	3.157 -0.035	3.230	181.2 -3.6	6.1 -3.9	3.255	178.6	6.1 -3.9				
4Y	2.111 -0.067	116.1 -1.2	3.521 -0.044	3.976	130.3 +3.1	42.1 -6	4.067	135.5	51.1 -6				
5Y	2.797 -0.032	100.8 -3.5	3.767 -0.060	4.163	140.7 +3	34.1 -3	4.198	145.2	38.1 -3				
7Y	3.541 0.004	89.6 -2.6	4.128 -0.037	4.687	195.5 -5.4	52.2 -1	4.798	203.5	62.2 -1				
10Y	3.941 -0.023	46.2 -0.8	4.358 -0.018	5.247	127.9 +0	82.6 +6.5	5.138	118.1	71.0 +4.1				
30Y	4.314 -0.016	7.5 2.2	4.335 0.018	5.572	121.3 -3.7	118.1 +5.0	5.523	120.8	113.1 +5.0				

DJIA 9282.1 +101.4 S&P 500 966.31 +12.22 CCMP 1717.32 +18.80 BE500 158.73 4.03

CASH MARKET		ACTIVE FUTURES		SWAPTION 1		3 Y	5 Y	7 Y	10 Y	CAP/F
1M LIBOR	2.58125	5 Year	113-11+ -01 ¹⁴	1Y	50.2	37.3	34.1	31.5	29.5	64.1
3M LIBOR	3.02625	10 Year	113-10+ -08	2Y	32.0	29.6	28.1	26.9	26.0	55.4
6M LIBOR	3.12125	LONG BOND	113-22+ -19+	3Y	27.2	26.2	25.4	24.9	24.5	43.8
1Y LIBOR	3.17375	5Y Swap	109-21 +02	4Y	24.6	23.9	23.6	23.4	23.2	37.2
Fed Funds	0.12500	10Y Swap	112-15+ -04+	5Y	22.0	21.8	21.1	22.1	22.0	33.6
O/N Repo	0.10000	30Y Swap	126-16+ -19	7Y	18.7	20.1	20.6	20.7	20.7	29.0
1W Repo	0.45000			10Y	18.1	18.2	19.1	19.0	18.7	25.5

Date Time	Event		Survey	Actual	Prior	Revised
10/31 5:30 US	1)	Personal Income	SEP 0.1%	0.2%	0.5%	0.4%
10/31 5:30 US	2)	Personal Spending	SEP -0.2%	-0.3%	0.0%	--
10/31 5:30 US	3)	PCE Deflator (YoY)	SEP 4.1%	4.2%	4.5%	--
10/31 5:30 US	4)	PCE Core (MoM)	SEP 0.1%	0.2%	0.2%	--

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Bloomberg - DOCP

<HELP> for explanation. N299 f M-Mkt DOCP
 Click on column headings to sort by terms

Issuer Lists	Options	Output Results To	DIRECT ISSUER COMMERCIAL PAPER											
Issuer	--1---	--2---	--3---	--4---	--5---	--6---	--7---	--15--	--30--	--45--	S&P	MDY	FI	Outs.(MM)
1) Calyon North America									2.595		A-1+	P-1	F1+	3800
2) Zions Bancorp					1.310	1.310	1.310*				NR	P-2	F1	
3) American Express Crd	0.050	0.050	0.050	1.000	1.000	1.000	1.000*	1.500*	2.000	2.100	A-1	P-1	F1	10939
4) General Electric Co	NQ	NQ	NQ	NQ	0.750	0.750	1.000*	1.500*	1.950*	2.250	A-1+	P-1	NR	11750
5) GE Capital Corp	NQ	NQ	NQ	NQ	0.750	0.750	1.000*	1.500*	1.950*	2.250	A-1+	P-1	NR	61600
6) Prudential Funding	NQ	NQ	NQ	NQ	NQ	NQ	1.000*	1.500*	2.000*	2.250*	A-1+	P-1	F1+	7000
7) UnionBanca Comm Fdg	0.200	0.350	0.350	0.350	0.350	0.350	1.000*	1.400*	2.430	2.550	A-1	P-1	F1	
8) Prudential Fin (4.2)	1.150	1.150	1.150	1.150	1.150	1.150	1.250*	1.500	2.600	2.600	A-1	P-2	F1	1200
9) Abbey Natl NA LLC	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-1+	P-1	F1+	5100
10) American Gen Fin Cor	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-3	P-2	F1	3296
11) American Gen Fin Inc	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-3	P-2	F1	322
12) AIG Funding Inc	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-1	P-1	NR	5731
13) Citigroup Fdg Inc	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-1+	P-1	F1+	32100
14) CommoLoCo Inc	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-3	P-2	F1	85
15) Chevron Corporation	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	A-1+	P-1	F1+	221

Issuer List-ALL ISSUERS Yellow=Executable, Blue=Executable/Enabled for trading

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M-Mkt **BTMM**

Change Country		US TREASURY & MONEY MARKETS										10:26:59		
06:47		US T-BILL YIELD/PRICE					EURO\$DEP		REVERSE		REPO			
BID/ASK	1.00 1.06	4W	0.17	0.06	0.18	0.17	3M	3.0000	4.5000	O/N	0.35	0.10		
LST/OPEN	1.00 1.48	3M	0.42	0.04	0.42	0.41	6M	3.0000	4.7500	1W	0.70	0.45		
HIGH/LOW	1.4 1.8	6M	0.93	-0.06	0.92	0.91	1Y	3.0000	5.0000	2W	0.70	0.45		
DJIA	9349.86 +169.17	1Y	1.29	-0.02	1.27	1.26	1M			1M	0.75	0.50		
S&P 500 FUT	966.70 +5.20					CCMP		1726.54 +28.02						
US BONDS YLD/BID/ASK/CHG					DEALER C		90D EUR\$ FU		FUNDS FU		LIBOR FIX			
1 1/2	10/31/10	1.564	99-27+	99-28	00	15D	1.200	DEC	97.81	OCT	99.03	1W	1.31875	
2 3/4	10/31/13	2.814	99-21	99-22+	02 1/4	30D	2.530	MAR	97.85	NOV	99.38	1M	2.58125	
4	08/15/18	3.957	100-10	100-11	02	60D	3.110	JUN	97.67	DEC	99.40	2M	2.96625	
4 1/2	05/15/38	4.323	102-29	102-30	04	90D	3.480	SEP	97.45	JAN	99.36	3M	3.02625	
SPOT FOREX		CRB		263.19 -3.35		120D	3.670	DEC	97.19	FEB	99.31	4M	3.06000	
JPY	97.4500					180D	3.700	MAR	97.07	MAR	99.24	5M	3.08750	
EUR	1.2749											6M	3.12125	
GBP	1.6199											1Y	3.17375	
CHF	1.1514													
MXN	12.6900													
CAD	1.2222													
30Y MBS							10yr Note Fut		SWAP RATE		Key Rates			
							CBT 113-11 - 07+		3Y		3.157		Prime	4.00
							CRUDE OIL		5Y		3.767		BLR	2.75
							NYM WTI 64.28 -1.68		10Y		4.358		FDTR	1.00
													Discount	1.25
Date Time		Event				Survey		Actual		Prior		Revised		
10/31	5:30	US	1)	Personal Income		SEP	0.1%	0.2%		0.5%		0.4%		
10/31	5:30	US	2)	Personal Spending		SEP	-0.2%	-0.3%		0.0%		--		
10/31	5:30	US	3)	PCE Deflator (YoY)		SEP	4.1%	4.2%		4.5%		--		
10/31	5:30	US	4)	PCE Core (MoM)		SEP	0.1%	0.2%		0.2%		--		
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Bloomberg - NIM2

NIM2
Enter # <GO> for DES.
New Issues: Agencies

M-Mkt **NIM**
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Issuer	Cpn (%)	Mty (M/D/Y)	Sprd (BP)	Outstand Amt (Mil)	Book Mgr (*=group)	Note
----- FRIDAY, OCTOBER 31 -----						
1) FED FARM CREDIT	3.4	05/06/11		USD 75	JOINT LEADS	2.5-NC1 1X
2) FANNIE MAE	5 $\frac{1}{2}$	11/06/18		USD 30	CS	10-NC1 BERM
3) FREDDIE MAC	4	11/10/11		USD 100	BNPPAR	3-NC3MO BERM
4) FREDDIE MAC	3.55	11/05/10		USD 100	RBSGC,UBS	2-NC1MO BERM
----- THURSDAY, OCTOBER 30 -----						
5) FED HOME LN BANK	3	05/04/10		USD 35	MIZ	1.5-NC6MO 1X
6) FED FARM CREDIT	FRN	11/04/10		USD 200	UBS	2-NC
7) FED FARM CREDIT	3.45	05/06/11		USD 50	JOINT LEADS	2.5-NC1 1X
8) FED HOME LN BANK	5 $\frac{1}{4}$	09/13/13		USD 710.8	BNPPAR	7-NC TAP INC
9) FED HOME LN BANK	2.04	02/04/09		USD 30	FTN	3MO-NC
10) FED FARM CREDIT	4	05/03/12		USD 100	JOINT LEADS	3.5-NC1 1X
11) FED HOME LN BANK	4.55	11/05/13		USD 15	MK,VS	5-NC2 1X
12) FED HOME LN BANK	4.2	11/05/12		USD 15	MK,VS	4-NC2 1X
13) FED HOME LN BANK	4.135	12/10/12		USD 50	HNTINV	4-NC2 1X
----- WEDNESDAY, OCTOBER 29 -----						
14) FED HOME LN BANK	2.35	01/30/09		USD 75	FTN	3MO NC INC
15) FED HOME LN BANK	3.11	11/03/09		USD 140	MK,VS	1-NC INC
16) FED HOME LN BANK	2.4	01/30/09		USD 85	FTN	3MO-NC INC
17) FED HOME LN BANK	3 $\frac{3}{4}$	11/03/11		USD 25	BAS	3-NC1 BERM

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Reconcilement of Daily Investments

- All proposed investments must be in compliance with the city's investment policy
- Trade tickets are emailed (via Bloomberg) or faxed by the selling broker/dealer to the City
- All investment activity is compiled into a transmittal form to the city's custodian bank

Reconcilement of Daily Investments

- Confirmation receipt received from the city's custodian bank of all investment activity
- Separation of activity - all daily investment activities reviewed by independent non-investment
- Daily investment activity is entered into the daily Cash flow for next days activity.

Summary

- Municipal investment activity is governed by:
 - California Government Code, 53600, et al
 - Local Agency Investment Policy
 - Safety
 - Liquidity
 - Yield (Return on Investment)

Where to Get More Information

- Investment Workshops:
 - CDIAC, CMTA, CSMFO, GFOA, GIOA, AFP
 - Financial Systems: Bloomberg, TradeWeb, BondEdge
 - Programs, such as:
 - Certified Treasury Professional (CTP)
 - Chartered Financial Analyst (CFA)
 - Professional Risk Management (PRM)
 - Master in Business Administration (MBA)

Questions and Answers

- There is no such thing as a dumb question.

or

- The only dumb question is the one you don't ask until after you do something.